CALIBRATION LINK SETUP GUIDE



Ver.1.00 Canon Inc.

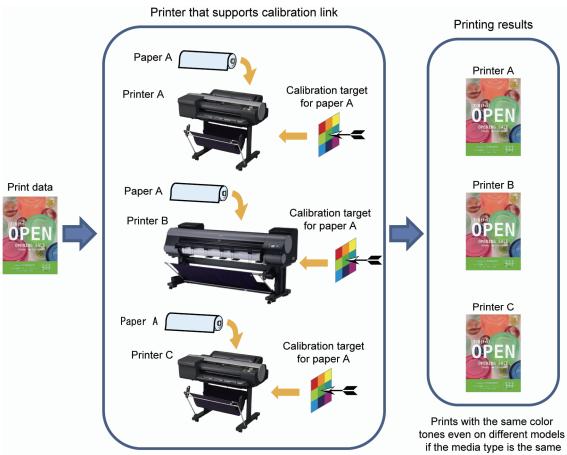
TABLE OF CONTENTS

OVERVIEW OF CALIBRATION LINK	. 3
COLOR CALIBRATION USING CUSTOM PAPER	4
OPERATING CALIBRATION LINK	. 4
CALIBRATION LINK ENVIRONMENT AND PAPER CONDITIONS	. 5
RANGE OF TEMPERATURE AND HUMIDITY	. 5
PAPER THAT CAN BE USED WITH CALIBRATION LINK	. 6
SETTING UP CALIBRATION LINK	. 8
1. PREPARE THE COMPUTER FOR MANAGING PAPER	10
2. ADD THE CUSTOM PAPER TO THE PRINTER WITH SPECTROPHOTOMETER UNI MOUNTED	
3. EXPORT THE CUSTOM MEDIA INFORMATION FILE	20
4. ADD THE CUSTOM PAPER TO THE OTHER PRINTERS	22
5. ADD THE CUSTOM PAPER TO THE COMPUTERS FOR PRINTING	24
6. EXECUTE PAPER FEED ADJUSTMENT AND COLOR CALIBRATION	26
OPERATION OF CALIBRATION LINK USING CCMC2	28
CHECKING CALIBRATION LINK	28
CHECKING THE PRINTER STATUS	29
EXECUTING COLOR CALIBRATION REMOTELY	29
Q & A	30
Q1. HOW DO I ADD CUSTOM PAPER TO WORK WITH?	30
Q2. HOW DO I ADD A PRINTER TO USE?	30
Q3. HOW DO I ADD A COMPUTER TO USE?	31
Q4. HOW DO I ONLY USE CALIBRATION LINK WITH GENUINE CANON PAPER?	31
Q5. WHAT DO I DO IF I RECREATED THE CUSTOM MEDIA INFORMATION?	31
Q6. WHAT DO I DO TO ADD CUSOM PAPER ADDED AT A DIFFERENT OFFICE?	32
Q7. WHAT DO I DO IF THE COLOR TONES OF THE PRINTED MATERIAL DO NOT MATCH?	33

OVERVIEW OF CALIBRATION LINK

Calibration link is a color management system exclusive to Canon that delivers a mean color difference of $\Delta E_{00} \le 2.0^{*1}$ in the printing results between printers that support calibration link *2 . The color management in calibration link is able to print using the same color tones between printers that support calibration link by executing color calibration on the individual printers using a calibration target (data for color calibration that matches the characteristics of the paper) under the prerequisite that the printers are using the same paper type.

- *1 The printers that support calibration link are the iPF6450, iPF6400, iPF8400, and iPF9400. (As of 22th August, 2012)
- *2 Values were measured under the Canon measurement environment.



This guide describes the settings and operation required for setting up calibration link.

COLOR CALIBRATION USING CUSTOM PAPER

In the past, executing color calibration was only possible with genuine Canon paper (including feed confirmed paper*1), for which the calibration targets were pre-incorporated into the printers. However, you are now able to perform color calibration even using custom paper*2 by purchasing a printer with a spectrophotometer unit mounted and using it to create the calibration target for the custom paper. Since calibration targets that have been created using a single printer with a spectrophotometer unit mounted can be used on all the printers that support calibration link in a system, it enables low-cost color management.

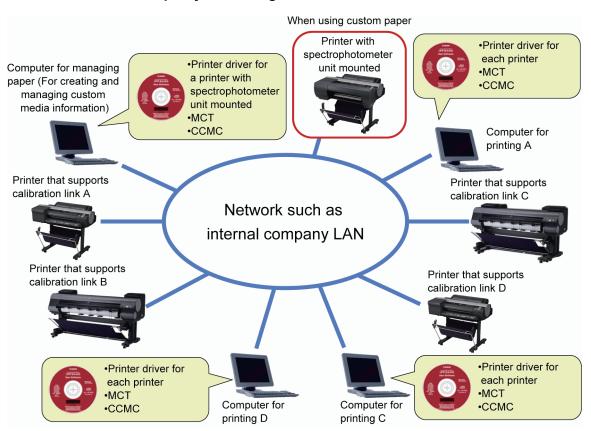
- *1 Paper where feeding through the printer has been confirmed under standard testing conditions by Canon.
- *2 Custom paper is paper that does not correspond to any genuine Canon paper or Canon feed confirmed paper.

OPERATING CALIBRATION LINK

Calibration link is operated by using the Color Calibration Management Console color management utility (hereinafter CCMC) that is included with printers that support calibration link.

You can perform centralized management of all connected printers that support calibration link from a computer where CCMC is installed. For example, this allows you to understand the color management status (the date and time when color calibration was executed and paper information) of each printer and to execute color calibration in a location remote from the printer.

Example system configuration with calibration link



CALIBRATION LINK ENVIRONMENT AND PAPER CONDITIONS

RANGE OF TEMPERATURE AND HUMIDITY

- In order to accurately adjust the color tones of printed material, calibration link should be set up and operated in an environment where the temperature and humidity are kept constant in the range of 15 to 30°C and 40 to 60%.
- Since the recommended use environment varies according to the paper type, use within the recommended environment range suiting the paper type.
- For details on the recommended environmental conditions for genuine Canon paper, see the "Paper Reference Guide". "Paper Reference Guide" can be installed on the computer from the "User Software CD-ROM" included with the printer at the same time as Media Configuration Tool (hereinafter MCT). Alternately, you may be able to download the latest version from the website. You can keep the "Paper Reference Guide" up-to-date with the latest information by downloading and installing the latest versions of the Media Information Files from the imagePROGRAF website.
- For details on the recommended environmental conditions for custom paper, check the environment recommended by the paper manufacturer.

PAPER THAT CAN BE USED WITH CALIBRATION LINK

Genuine Canon paper

Calibration link is possible with the paper marked with "Yes" in the following table.

The paper that can be used with calibration link varies depending on the Country or Region of Use selected when the MCT was installed.

	Country or Region of Use selected when the MCT was installed		
Paper type (Display name in the control panel)	Japan, Asia, Oceania	EU	North or South America
Opaque Paper 120	No	Yes	No
HW Coated	Yes	Yes	Yes
GlossyPhoto 170g	Yes	Yes	Yes
SatinPhoto 170g	Yes	Yes	Yes
GlossyPhotoHG170	Yes	Yes	Yes
SemGlsPhotoHG170	Yes	Yes	Yes
GlossyPhoto 200g	No	Yes	Yes
SatinPhoto 200g	No	Yes	Yes
GlossyPhoto 240	No	Yes	Yes
SatinPhoto 240	No	Yes	Yes
GlossyPhotoHG255	Yes	Yes	Yes
SemGlsPhotoHG255	Yes	Yes	Yes
RC Photo Luster	No	No	Yes
Premium GI2 280	Yes	Yes	Yes
Prem.SemiGl2 280	Yes	Yes	Yes
LW Gloss Proof	Yes	No	Yes
LW Matte Proof	Yes	No	Yes
Proofing Paper 3	Yes	No	Yes
Proofing Paper	Yes	No	Yes
Proof SemiGl 195	No	Yes	No
FineArt Photo	Yes	Yes	Yes
FneArt HW Photo	Yes	Yes	Yes

Custom paper

Calibration link is possible with the paper that meets the following conditions.

	Item	Specifications
Size	For creating calibration	Roll widths * (iPF6450)
	targets	406.4 mm to 610 mm
	For executing color	Roll widths *
	calibration	iPF6400/iPF6450: 254 mm to 610 mm
	(automatic adjustment)	iPF8400: 254 mm to 1,118 mm
		iPF9400: 254 mm to 1,524 mm
		Sheets size
		(iPF6400/iPF6450 only)
		A4/LTR to A1
Thickness		0.1 to 0.5 mm
Category		Glossy paper, semi-glossy paper, proofing
		paper, coated paper, art paper

^{*} For the sizes of rolls that can be used with a printer, check the catalog or Canon website.

Please understand that Canon offers absolutely no guarantee regarding the print quality or feed properties of custom paper.

Do not use custom paper corresponding to any of the following criteria.

- Colored paper (yellow coated paper, etc.)
- Transparent paper (film, etc.)
- Paper with poor coloring that lack density
- Paper with bumps (canvas, etc.)
- Paper where the surface is not even (Japanese paper, etc.)
- Paper that curls or ripples easily upon absorbing ink (lightweight coated paper, etc.)

SETTING UP CALIBRATION LINK

Calibration link setup is performed after setting up the printer and spectrophotometer unit. Set up the printer and spectrophotometer unit by following the setup guides included with the printer.

The following items are used for setting up calibration link.

- The paper you want to match the colors on using color calibration
- A printer with a spectrophotometer unit mounted (Calibration link does not need to be performed if you are only using genuine Canon paper)
- A printer that supports calibration link
- Computer for managing paper (Only one computer is used for adding custom paper and exporting custom media information files. Calibration link does not need to be performed if you are only using genuine Canon paper.)
- Computer for printing (There can be more than one of these computers, and one may be used simultaneously as the computer for managing paper)
- The "User Software CD-ROM" for each model of printer (used for installing MCT and the printer driver)

If you are using custom paper, calibration link setup is performed using the following procedure.

PREPARE THE COMPUTER FOR MANAGING PAPER (P.10)
 Install the MCT and printer driver on the computer for managing paper.



2. ADD THE CUSTOM PAPER TO THE PRINTER WITH SPECTROPHOTOMETER UNIT MOUNTED (P. 12)

Use the printer with the spectrophotometer unit mounted and MCT on the computer for managing paper to add the custom paper to the printer with spectrophotometer unit mounted and create the calibration target.



3. EXPORT THE CUSTOM MEDIA INFORMATION FILE (P. 20) Use MCT to export the media information file for the custom paper you added in step 2. to the computer for managing paper.



4. ADD THE CUSTOM PAPER TO THE OTHER PRINTERS (P. 22) Use MCT to import the custom media information file you exported in step 3. and add the custom paper including the calibration target to all of the printers that do not have a spectrophotometer unit mounted.



5. ADD THE CUSTOM PAPER TO THE COMPUTERS FOR PRINTING (P. 24) Use MCT to import the custom media information file you exported in step 3. and add the custom paper to the computers for printing.



6. EXECUTE PAPER FEED ADJUSTMENT AND COLOR CALIBRATION (P. 26) Load the custom paper in the printer performing calibration link, and execute paper feed adjustment and color calibration from the control panel.

The setup if you are performing calibration link only on genuine Canon paper is only to execute color calibration. Refer to "6. EXECUTE PAPER FEED ADJUSTMENT AND COLOR CALIBRATION" on P. 26 for details on how to execute color calibration.

1. PREPARE THE COMPUTER FOR MANAGING PAPER

Use the "User Software CD-ROM" included with the printer to install the MCT and printer driver on the computer for managing paper.

Install the MCT for each model (iPF6450, iPF6400, etc.) of printer that will perform calibration link. Install the corresponding printer drivers for all of the printers that will perform calibration link. (For example, if you have two iPF9400 units, you need to install two iPF9400 printer drivers.)

After installing the MCT and printer drivers, perform the following procedure.

1. Start the MCT.

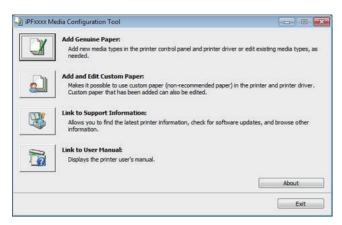
Windows

From the start menu > All Programs > iPFxxxx Media Configuration Tool > iPFxxxx Media Configuration Tool.

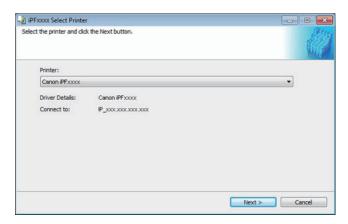
Mac OS X

From the Applications menu > Canon Utilities > iPFxxxx Media Configuration Tool > MCTxxxx.app.

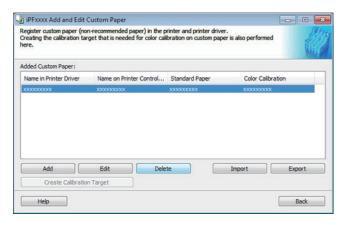
Click the Add and Edit Custom Paper button in the Media Configuration Tool main window.



3. Select the printers to perform calibration link on in **Printer** in the **Select Printer** dialog box and click the **Next** button.



 Check that there is no existing custom paper in the printers or printer drivers in the Added Custom Paper list.



- 5. If there is existing custom paper, it all needs to be deleted first. Select all of the custom paper in the list and click the **Delete** button.
 - All of the existing custom paper is deleted from the printers and printer drivers.

If you have multiple printers, repeat steps 1 to 5 on each of the printers to delete existing custom paper from all of the printers and printer drivers including the printer with spectrophotometer unit mounted.

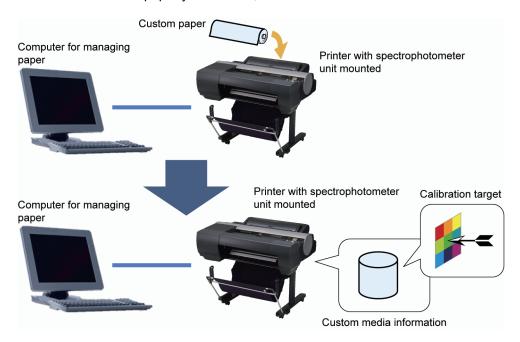
After finishing this operation, always create custom paper information on this computer for managing paper.

After you have finished this operation, you do not need to delete existing custom paper from the computer for managing paper or from the printers that support calibration link.

If you need any of the custom paper that was deleted, use the procedure to newly add it.

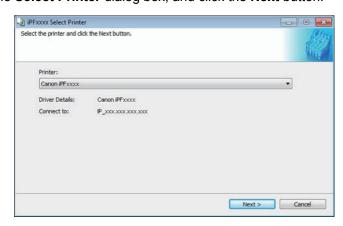
2. ADD THE CUSTOM PAPER TO THE PRINTER WITH SPECTROPHOTOMETER UNIT MOUNTED

Use the MCT installed on the computer for managing paper to add the custom paper to the printer with spectrophotometer unit mounted and the printer driver, and then create the calibration target. Use rolls at least 406.4mm (16 inches) wide for the custom paper. For the specifications of the custom paper you can use, see P. 7.

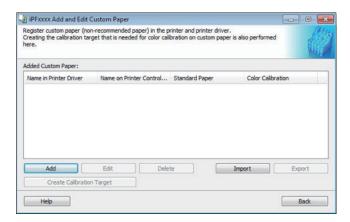


Custom paper is added to the printer with spectrophotometer unit mounted by using the following procedure.

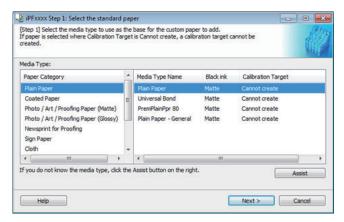
- Run the MCT (iPF6450 Media Configuration Tool for the iPF6450) for the printer where the spectrophotometer unit is mounted on the computer for managing paper, and click the Add and Edit Custom Paper button in the main window.
- Select the printer with the spectrophotometer unit mounted to use for adding custom paper in **Printer** in the **Select Printer** dialog box, and click the **Next** button.



 Once the Add and Edit Custom Paper dialog box has been displayed, click the Add Button.



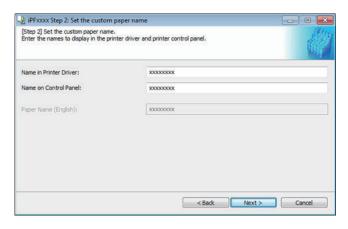
4. The **Step 1: Select the standard paper** dialog box is displayed. In **Paper Category**, select the category of media type to use as the basis of the custom paper you are adding. Select the category that you think is the closest to the custom paper you are adding.



- 5. The media type names of the Canon genuine paper and feed confirmed paper within the selected category are shown in **Media Type Name**. Select the media type to use as the basis of the custom paper, and click the **Next** button.
- If you do not know which media type to use as the basis of the custom paper, click the
 Assist button to open the Media Type Selection Assistance dialog box, and then set either
 the Weight (grammage) or the Thickness. The MCT automatically selects the appropriate
 paper from the selected paper category.
- If Cannot create is displayed in Calibration Target for the selected standard paper, a
 calibration target cannot be created for that custom paper. Select standard paper that a
 calibration target can be created for.
- For custom paper added using standard paper where Can create for Auto Adjust (High Precision) is displayed in Calibration Target, the calibration target for executing color calibration Auto Adjust cannot be created in the control panel and CCMC.

The Step 2: Set the custom paper name dialog box is displayed.
 Enter an arbitrary name to display in the printer control panel and printer driver, and then

click the **Next** button.

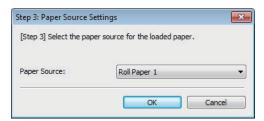


Depending on the selected standard paper, you might not be able to enter the **Name in Printer Driver** and add the created custom paper to the printer driver as-is. In this case, create the custom paper information by changing the standard paper to another paper. To use the custom paper in the printer driver, create it by changing the standard paper to another paper.

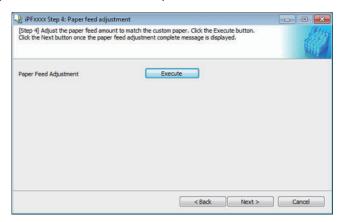
7. Load the custom paper in the printer and then click the **OK** button.



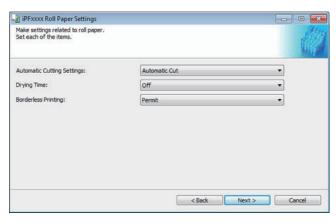
8. The **Step 3: Paper Source Settings** dialog box is displayed. Select **Roll Paper 1** and click the **OK** button.



9. Since **Step 4: Paper feed adjustment** is automatically performed when creating the calibration target later, it is omitted at this point. Click the **Next** button.



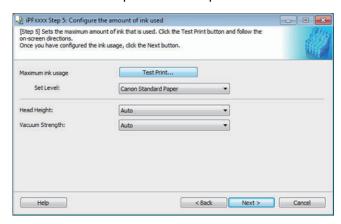
10. The **Roll Paper Settings** dialog box is displayed.



Configure the following settings as necessary, and then click the **Next** button.

Setting	Details	
	Configures the method for cutting roll paper when it is ejected after printing.	
	Automatic Cut: Rolls are automatically cut by the cutter unit.	
Automatic	• Eject Cut: When the Cut key is pressed on the printer control panel, the	
Cutting	rolls are cut by the cutter unit. Select this if you do not want the printed	
Settings	material to drop immediately after printing, such as to wait for the ink to dry.	
	User Cut: Cutting is not performed by the cutter unit. Cut the rolls using scissors	
	after each sheet. Select this for paper that cannot be cut by the cutter unit.	
	Specify the time that the printer waits for ink to dry, as needed.	
Drying	Off: Ejects immediately after printing finishes.	
Time	· 30 sec./1 min./3 min./5 min./10 min./30 min./60 min.: Ejects after the	
	specified time has elapsed after printing finishes.	
Borderless	Configures whether or not to permit borderless printing.	
	Permit: Borderless printing is permitted.	
Printing	Deny: Borderless printing is denied.	

- Depending on the paper, there are types that cannot be cut by the cutter unit, and types that speed deterioration of the blade and cause damage to the cutter. For thick paper, hard paper, etc. do not use the cutter unit, and instead cut the roll paper using scissors, etc. after printing. In this case, select User Cut as the Automatic Cutting Settings.
- If borderless printing is performed on paper where the ink drying is poor, the cutter unit may leave
 scratches where it touches the printed surface, or may not cut correctly. In this kind of situation,
 configure the amount of time to wait for the ink to dry after printing using **Drying Time**.
- For custom paper where there is a need to set the **Automatic Cutting Settings** to **User Cut**, set the **Borderless Printing** to **Deny**.
- 11. The **Step 5: Configure the amount of ink used** dialog box is displayed. First, click the **Test Print** button to perform a test print of each level.

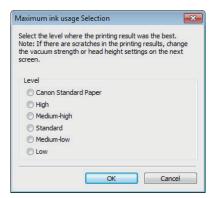


12. The Test Print Settings dialog box is displayed.

Select the print priority and print quality of the test print using **Print Priority** and **Print Quality**. Set the level to test print using **Maximum ink usage** and the image to use using **Image used in test print**, and then click the **Start Print** button.



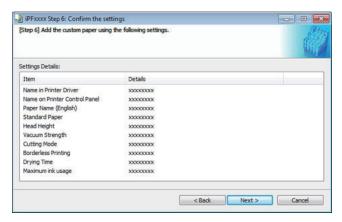
13. Determine and set the ink level that is thought to give the best visual test print results with no bleeding or scraping of ink.



Configure Head Height and Vacuum Strength as required and click the Next button.
 Usually, these do not need to be set.

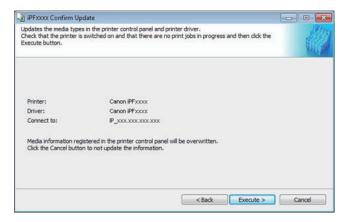


- If you set the **Head Height** lower than the automatically set height in parentheses (), check that the printhead does not rub against the paper. (If the printhead rubs against the paper, there will be scratches in the printing results.) If the printhead rubs against the paper, this can cause damage to the printhead.
- If you change the **Vacuum Strength**, check that the printhead is not rubbing against the paper. (If the printhead rubs against the paper, there will be scratches in the printing results.) If the printhead rubs against the paper, this can cause damage to the printhead.
- For details on the **Head Height** and **Vacuum Strength**, refer to the help.
- The Step 6: Confirm the settings dialog box is displayed.
 Configure the settings of the custom paper, and then click the Next button.



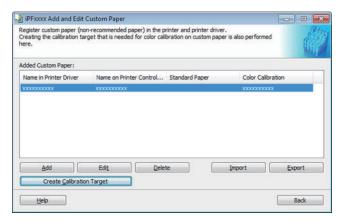
16. The **Confirm Update** dialog box is displayed.

Confirm the updates and then click the **Execute** button.

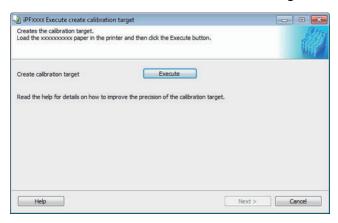


17. The Add and Edit Custom Paper dialog box is displayed.

Select the paper that you want to create the calibration target for from the **Added Custom**Paper list and click the **Create Calibration Target** button.



18. Click the **Execute** button in the **Execute create calibration target** dialog box.



Creating the calibration target takes approximately 40 minutes.

- Once the calibration target is registered in the printer, click the Next button in the Execute create calibration target dialog box.
- 20. The **Confirm Update** dialog box is displayed.

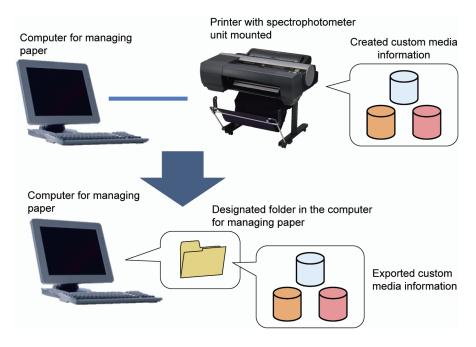
Confirm the update and click the **Execute** button.

This completes adding the custom paper.

If you have multiple different types of custom paper, perform steps 1 to 20 for each type of paper. Once you have finished adding all of the custom paper, export the custom media information file.

3. EXPORT THE CUSTOM MEDIA INFORMATION FILE

Export the media information file for the custom paper you added to the printer with spectrophotometer unit mounted to the computer for managing paper so that it can be added to each of the printers and each of the printer drivers on the computers.



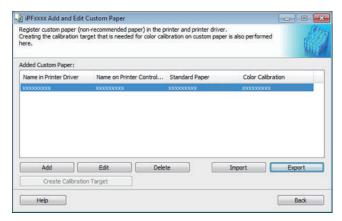
The custom media information file is exported using the following procedure.

- Run the MCT (iPF6450 Media Configuration Tool for the iPF6450) for the printer where the spectrophotometer unit is mounted on the computer for managing paper, and click the Add and Edit Custom Paper button in the main window.
- 2. Select the printer with a spectrophotometer unit mounted where the custom paper was added in **Printer** in the **Select Printer** dialog box and click the **Next** button.

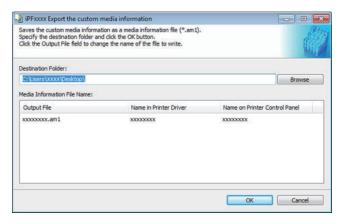
3. The Add and Edit Custom Paper dialog box is displayed.

Select the paper you want to export to media information file from the **Added Custom Paper** list and then click the **Export** button.

You can select multiple custom media information files.



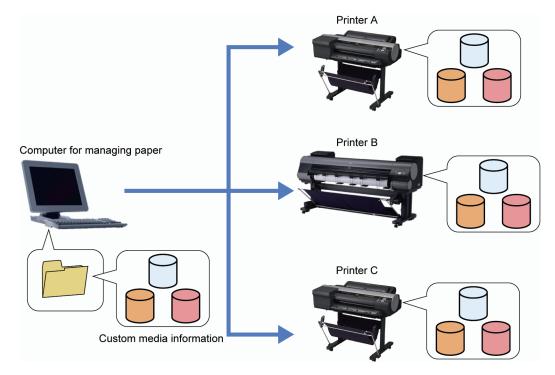
4. Specify the location to save the Custom Media Information File.



Click the **OK** button to export the custom media information file to the specified folder. This completes exporting the media information file for the custom paper.

4. ADD THE CUSTOM PAPER TO THE OTHER PRINTERS

Import the exported custom media information file and add the custom paper including the calibration target to all of the printers except the printer with spectrophotometer unit mounted.



Adding the calibration target to the other printers allows you to perform color calibration using the custom paper.

Custom paper is added to the other printers by using the following procedure.

- Connect the printer where you want to add the custom paper to the computer for managing paper.
- On the computer for managing paper, run the MCT for the model name of the connected printer (iPF6400 Media Configuration Tool for the iPF6400), and click the Add and Edit Custom Paper button in the main window.
- Select the printer where you want to add the custom paper in Printer in the Select Printer dialog box, and click the Next button.
- 4. Once the **Add and Edit Custom Paper** dialog box has been displayed, click the **Import** button.

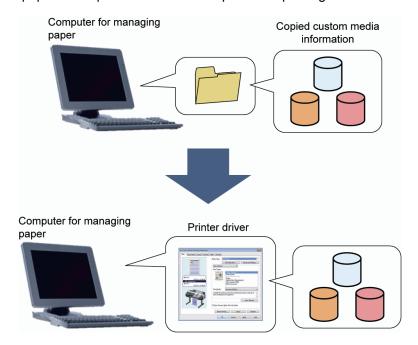
- Select the exported custom media information file (.am1 file) and click the **Next** button. You can select multiple custom media information files.
 Custom media information files that are displayed grayed out in the list cannot be selected because they cannot be used in the printer being added.
- 6. Select Update the printer control panel and printer driver from Update Target in the Confirm Update dialog box.

Add the custom paper to the target printer.

If you have multiple printers, repeat the work in steps 2 to 6 for each of the printers, and make the custom paper on all of the printers the same.

5. ADD THE CUSTOM PAPER TO THE COMPUTERS FOR PRINTING

Add the custom paper to the printer drivers of computers for printing.



You can print on custom paper by adding the custom paper to the printer driver on the computer for printing.

Use the "User Software CD-ROM" included with the printer to install MCT and the printer driver on the computer. MCT and the printer driver need to be installed for each model of printer. Install the MCT for each model of printer to print on.

Install the corresponding printer drivers for all of the printers to print on.

Custom paper is added to the printer and the printer driver on the computer by using the following procedure.

- Save the custom media information file (.am1 file) you exported to the computer for managing paper in any folder on the computer for printing.
- 2. Connect the computer for printing to the printer.
- 3. Run MCT for the model name of the printer you are printing to from the computer for printing, and click the **Add and Edit Custom Paper** button in the main window.
- Select the printer you are printing to in **Printer** in the **Select Printer** dialog box, and click the **Next** button.

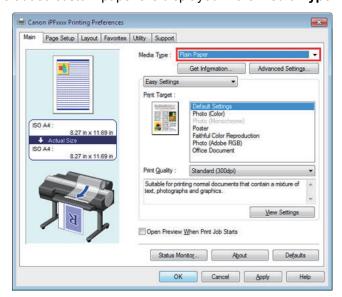
- Once the Add and Edit Custom Paper dialog box has been displayed, click the Import button.
- Select the saved custom media information file (.am1 file) and click the **Next** button.
 You can select multiple custom media information files.
- 7. Select Update the printer driver only from Update Target in the Confirm Update dialog box and then click the Execute button. The custom paper is added to the printer driver on the computer for printing.

If you have multiple printers, repeat steps 2 to 7 for each of the printers.

If you have multiple computers for printing, repeat steps 1 to 7 for each of the computers for printing.

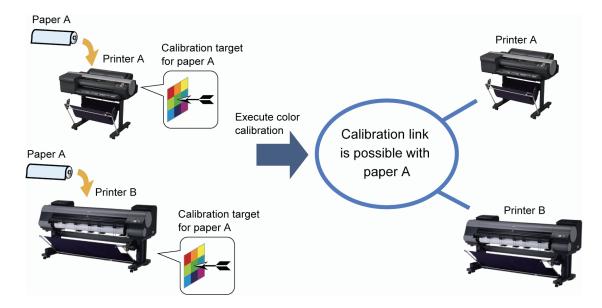
You can check the custom paper added to the printer driver on the computer for printing using the following procedure.

- Select the printer to perform calibration link from **Printers and Faxes** on the computer for printing.
- 2. Right-click and select **Printing Preferences** to display the **Main** sheet of the printer driver. The names of the added custom paper are displayed in the **Media Type** menu.



6. EXECUTE PAPER FEED ADJUSTMENT AND COLOR CALIBRATION

Execute paper feed adjustment and color calibration on the paper you are using for printing, and put the printer and paper into a state where calibration link is possible.



The time required for paper feed adjustment and color calibration is approximately 15 minutes for each paper type.

Furthermore, refer to the following for details on the size and amount required.

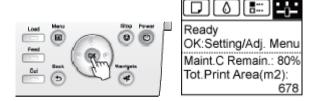
When Using Rolls	An unused roll at least 254.0 mm (10.00 in) wide (however, a roll at least 406.4 mm (16.00 in) wide depending on the paper type)
When Using Sheets (only for genuine Canon paper)	One sheet of unused paper of at least A4/Letter size (however, one sheet of unused paper of at least A2 size depending on the paper type)

Paper feed adjustment and color calibration are executed by using the following procedure.

- Load the paper to use for printing into the printer and set the paper type.
 For genuine Canon paper, paper feed adjustment is not needed. Once the paper is loaded and the paper type is set, perform the procedure from step 8.
- 2. On the **Tab Selection screen** of the printer control panel, press ◀ or ▶ to select Settings/Adj. tab (♣).

3. Press the **OK** button.

The Set./Adj. Menu is displayed.



- 4. Press ▲ or ▼ to select **Adjust Printer**, and then press the **OK** button.
- 5. Press ▲ or ▼ to select **Feed Priority**, and then press the **OK** button.
- 6. Press ▲ or ▼ to select Adj. Quality, and then press the OK button.
- 7. Press ▲ or ▼ to select **Auto(OtherPaper)**, and then press the **OK** button to execute the paper feed adjustment.
- 8. Once the paper feed adjustment has finished, on the **Tab Selection screen** of the printer control panel, press ◀ or ► to select Settings/Adj. tab () and then press the **OK** button.
- 9. Press ▲ or ▼ to select **Adjust Printer**, and then press the **OK** button.
- 10. Press ▲ or ▼ to select **Calibration**, and then press the **OK** button.
- 11. Press ▲ or ▼ to select **Auto Adjust**, and then press the **OK** button to execute color calibration.

Note that although **AutoAdjst(HiPrc)** is also displayed for printers that have a spectrophotometer unit mounted, you should select **Auto Adjust**.

If you are using multiple paper types for printing, execute paper feed adjustment and color calibration for each paper type.

If you have multiple printers, perform steps 1 to 11 for each of the printers.

This completes setting up calibration link.

OPERATION OF CALIBRATION LINK USING CCMC

CCMC can be installed from the "User Software CD-ROM" included with the printer or downloaded and installed from the Canon website.

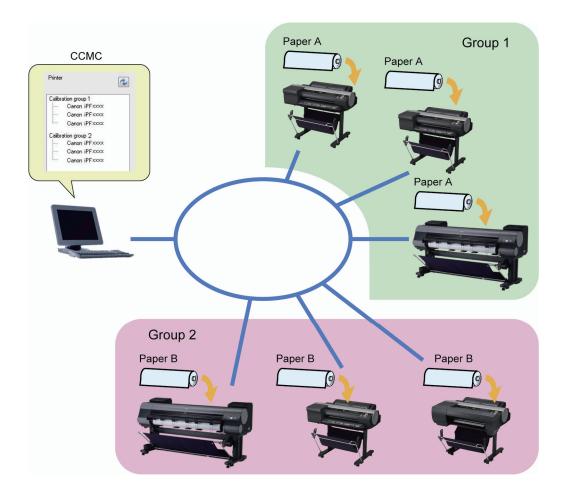
For detailed information on how to operate CCMC, refer to the "User's Guide" on the "User Manual CD-ROM" included with the printer.

The following introduces an example of operating calibration link using CCMC.

CHECKING CALIBRATION LINK

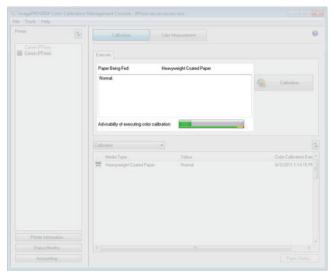
In CCMC, printers that are in the calibration link state* for the paper that is being fed where color calibration has been executed are displayed grouped in the **Printer** list. Printers in the same group print using the same color tones.

- * The following criteria are required in order for a printer to be in the calibration link state.
- · Being fed the same paper
- · Color calibration has been executed on that paper



CHECKING THE PRINTER STATUS

• is displayed next to the printer name such as if a certain amount of printing has been executed after executing color calibration. If you select the printer, you can check the detailed status of the printer in the **Calibration** sheet in the main window.



EXECUTING COLOR CALIBRATION REMOTELY

For printers where a message such as It is recommended that you execute color calibration to keep the printer in the best condition. is displayed in the Calibration sheet in the main window, you will not be able to print using the correct color tones if used as-is. If this happens, click the Calibration button to execute color calibration remotely so that you can print using the correct color tones.

Q1. HOW DO I ADD CUSTOM PAPER TO WORK WITH?

A1. Use the following procedure.

- Add the new custom paper and calibration target to the printer with spectrophotometer unit mounted by following the procedure in "2. ADD THE CUSTOM PAPER TO THE PRINTER WITH SPECTROPHOTOMETER UNIT MOUNTED" on P. 12. Always use the same computer for managing paper for adding custom paper and calibration targets.
- Export the media information file for the new custom paper on the computer for managing paper by following the procedure in "3. EXPORT THE CUSTOM MEDIA INFORMATION FILE" on P. 20.
- Add the new custom paper to the printer driver in the computer and each of the printers by following the procedure in "4. ADD THE CUSTOM PAPER TO THE OTHER PRINTERS" on P. 22.
- 4. Add the new custom paper to the printer driver on the computer for printing by following the procedure in "5. ADD THE CUSTOM PAPER TO THE COMPUTERS FOR PRINTING" on P. 24.
- 5. Load the newly added custom paper into each printer, and execute color calibration.

Q2. HOW DO I ADD A PRINTER TO USE?

A2. Use the following procedure.

- Connect the new printer to the computer for managing paper and install the printer driver for the new printer.
- 2. Check whether any custom paper has been added to the new printer, and delete all of the existing custom paper if it has.
- 3. Add the new custom paper to all of the printers by following the procedure in "4. ADD THE CUSTOM PAPER TO THE OTHER PRINTERS" on P. 22.
- 4. Connect the new printer to the computer for printing, and install the printer driver for the new printer.
- 5. Add the custom paper to the printer driver newly installed on the computer for printing by following the procedure in "5. ADD THE CUSTOM PAPER TO THE COMPUTERS FOR PRINTING" on P. 24.
- 6. Load the paper into the new printer, and execute color calibration.

Q3. HOW DO I ADD A COMPUTER TO USE?

A3. Use the following procedure.

- 1. Connect the printers to the new computer and install the printer drivers for the printers that perform calibration link. If the printer drivers are already installed, first uninstall them and then install them again.
- Add the custom paper to the printer driver in the new computer by following the procedure in "5. ADD THE CUSTOM PAPER TO THE COMPUTERS FOR PRINTING" on P. 24.

Q4. HOW DO I ONLY USE CALIBRATION LINK WITH GENUINE CANON PAPER?

A4. Load the genuine Canon paper into the printer to print from, and execute color calibration.

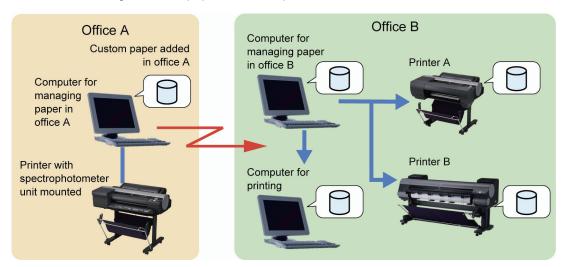
Q5. WHAT DO I DO IF I RECREATED THE CUSTOM MEDIA INFORMATION?

A5. Use the following procedure.

- Add the recreated custom paper to all the printers by following the procedure in "4. ADD THE CUSTOM PAPER TO THE OTHER PRINTERS" on P. 22.
- 2. Add the recreated custom paper to the printer driver on the computer for printing by following the procedure in "5. ADD THE CUSTOM PAPER TO THE COMPUTERS FOR PRINTING" on P. 24.
- 3. Load the custom paper into each printer, and execute color calibration.

Q6. WHAT DO I DO TO ADD CUSOM PAPER ADDED AT A DIFFERENT OFFICE?

- A6. Always add custom paper that was added at a different office to the printers and computers for printing from the computer for managing paper using the following procedure.
 - 1. Save the media information file for the custom paper that was added in Office A on the computer for managing paper in Office B.
 - 2. Add the custom paper that was added in Office A to the all of the printers in Office B by following the procedure in "4. ADD THE CUSTOM PAPER TO THE OTHER PRINTERS" on P. 22.
 - 3. Add the custom paper that was added in Office A to the printer driver on the computer for printing in Office B by following the procedure in "5. ADD THE CUSTOM PAPER TO THE COMPUTERS FOR PRINTING" on P. 24.
 - 4. Load the target custom paper into each printer in Office B, and execute color calibration.



Q7. WHAT DO I DO IF THE COLOR TONES OF THE PRINTED MATERIAL DO NOT MATCH?

A7. If the color tones do not match between printers even after configuring the calibration link settings, check the following table and perform the corrective actions for the corresponding items.

Execute color calibration after you have finished all of the corrective actions.

Item	Corrective Action
Is the custom paper you are using compatible	Use custom paper that meets the conditions
with calibration link?	listed on P. 7.
Do the whiteness and texture of the loaded	Load custom paper that has comparable
custom paper differ between the printers?	whiteness and texture.
Is the printed material dirty?	Check the interior of the upper cover of the
	printer and the interior of the
	spectrophotometer unit, and clean them if
	they are dirty. (See "Cleaning the Printer" in
	"Maintenance and Consumables" in the
	"User's Guide")
Are the printhead nozzles clogged?	Print a nozzle check pattern, and if the
	nozzles are clogged, execute printhead
	cleaning.
	If the clogged nozzles are not cleared by
	cleaning the printhead, replace the printhead.
	(See "Printheads" in "Maintenance and
	Consumables" in the "User's Guide")
Is the printer in the calibration link state?	Run CCMC and check the calibration group in
	the Printer list.
	If the calibration groups are not the same
	because the paper type settings are different,
	change the paper type settings in the printer
	control panel. (See "Changing the Type of
	Paper" in "Enhanced Printing Options" in the
	"User's Guide")

Item	Corrective Action
Is the message The calibration target in the	Read the media information file that contains
media information file is	the latest calibration target information into
not up-to-date. displayed in CCMC?	the target printer by following the procedure in
	"4. ADD THE CUSTOM PAPER TO THE
	OTHER PRINTERS" on P. 22.
Is a message recommending that you	Click the Calibration button in CCMC to
execute color calibration displayed in CCMC?	execute color calibration.
Is the wrong paper loaded in the printer?	Replace with the paper configured in the
	printer and printer driver.
Is Use Adj. Value in Set./Adj. Menu in the	Configure the following settings in the
printer control panel set to Disabled ?	Set./Adj. Menu in the control panel.
	Select Calibration from Adjust Printer
	and then press the OK key.
	2. Select Use Adj. Value and then press the
	OK key.
	3. Select Enabled and then press the OK
	key.
Is Calibration Value in the printer driver set	Open the Paper Detailed Settings dialog
to Disregard Value or Printer Default?	box in the printer driver, and set Calibration
	Value to Use Value.
	To display the Paper Detailed Settings
	dialog box, click Advanced Settings
	(Windows) / Set (Mac OS X) in Media Type
	in the Main sheet / Main pane.
Are the print modes the same in all of the	Make the settings the same in Easy Settings
printer drivers?	or Advanced Settings in all of the printer
	drivers.

Item	Corrective Action
Do the ICC profile settings match in all of the	Open the Matching sheet (Windows) /
printer drivers?	Matching pane (Mac OS X) in the printer
	driver and make the ICC profiles the same in
	Printer Profile Settings in all of the printer
	drivers.
	Check also whether the ICC profiles saved on
	the computers are the same.
	To display the Matching sheet/pane, click
	Color Settings / Set in Color Mode in
	Advanced Settings in the Main sheet/pane,
	and then click the Matching sheet/tab.
Is an error message displayed in the control	Check the content of the error message and
panel?	perform the corrective action. (See "Error
	Messages" in the "User's Guide")
Do the serial numbers of the	Ensure that the serial numbers of the
spectrophotometer sensor and white	spectrophotometer sensor and white
calibration tile match?	calibration tile match.
	Furthermore, if you replace the
	spectrophotometer sensor, always replace
	the spectrophotometer sensor and white
	calibration tile as a set. (See "Replacing the
	Spectrophotometer Sensor of the
	Spectrophotometer Unit (option)" in
	"Maintenance and Consumables" in the
	"User's Guide")
Are you using the paper within the	Make the environment in which you are
recommended environmental ranges for that	printing match the conditions listed on P. 5.
paper type?	